Application No. 10/561,175 Amendment dated December 17, 2010 Reply to Office Action of August 17, 2010

AMENDMENTS TO THE CLAIMS

Claims 1-14. (Cancelled).

- 15. (Currently Amended) A pharmaceutical composition <u>formulated</u> for sublingual; buecal or enteric administration, <u>wherein the active ingredient is protected from absorption and/or degradation prior to entry into the intestine</u>, comprising a mixture of peptides having a molecular weight of less than 10 kDa obtainable by hydrolysis with chymotrypsin or any other protease of an antigenic structure which induces graft rejection, allergic reaction or autoimmune disease, said antigenic structure being a protein, and said peptides being fragments of said protein.
- (Previously presented) The pharmaceutical composition of claim 15 wherein the amount of said mixture of peptides is in the range of 0.001 to 1000 pg.
- (Previously presented) The pharmaceutical composition of claim 16 wherein the amount of said mixture of peptides is in the range of 1 to 100 kg.
 - 18-21. (Canceled).
- 22. (Previously Presented) The pharmaceutical composition of claim 15 comprising additionally one or more substances selected from the group consisting of nucleoside triphosphates, nucleoside diphosphates, nucleoside monophosphates, nucleic acids, peptide nucleic acids, nucleosides or analogs thereof, immunosuppressive cytokines, compounds inducing expression of immunoproteasomes, 1,25-dihydroxyvitamin D3 or analogs thereof, lipopolysaccharides, endotoxins, heat shock proteins, thioredoxin with either NADPH or NADP-thioredoxin reductase, dithiothreitol, adrenergic receptor agonists such as salbutanol, adrenergic receptor antagonists such as butoxamine, compounds that regulate the expression of the adhesion molecule 1CAM-1, N-acetyl-L-cysteine, y-L-glutamyl-L-cysteinyl-glycine (reduced L-glutathione), alpha-2- macroglobulins, inducers for Foxp3 gene expression, flavonoids, isoflavonoids, pterocarpanoids, stilbenes such as resveratrol, tachykinin receptor antagonists, chymase inhibitors, a muco-adhesive agent for attaching the particle to the intestinal mucosal lining such as a plant lectin, zinc, zinc salts, polysaccharides, vitamins and bacterial lysates.
- 23. (Previously Presented) The pharmaceutical composition of claim 15 wherein the antigenic structure is selected flora the group consisting of insulin, thyroglobulin, thyroid

2

Application No. 10/561,175

Amendment dated December 17, 2010

Reply to Office Action of August 17, 2010

peroxidase, type II collagen, gliadin, GAD65, proteolipid protein, S-antigen, acetylcholin receptor, haptenized colonic proteins, interphotoreceptor retinoid binding protein, myelin basic protein, myelin oligodendrocyte glycoprotein, peripheral nerve P2, cytoplasmic TSH receptor, intrinsic factor, lens proteins, platelets, nucleoproteins such as histones, heat shock proteins, MHC I, MHC II, MHC-peptide complexes, milk allergens, venom allergens, egg allergens, weed allergens, grass allergens, tree allergens, shrub allergens, flower allergens, grain allergens, fungi allergens, fruit allergens, berry allergens, nut allergens, seed allergens, bean allergens, fish allergens, shellfish allergens, meat allergens, spices allergens, insect allergens, mite allergens, animal allergens, animal dander allergens, allergens of Hevea brasiliensis, coagulation factors and blood group antigens.

Docket No.: 37998-237505

- 24 -29. (Canceled).
- 30. (Previously presented) A pharmaceutical composition comprising a mixture of peptides having a molecular weight of less than 10 kDa obtainable by hydrolysis with chymotrypsin or any other protease of an antigenic structure which induces graft rejection, allergic reaction or autoimmune disease, wherein the antigenic structure is a protein, and wherein the pharmaceutical composition is formulated for enteric administration.
- 31. (Currently amended) A pharmaceutical composition formulated for sublingual, buesal or enteric administration, wherein the active ingredient is protected from absorption and/or degradation prior to entry into the intestine, comprising a hydrolyzed product of an antigenic protein, which antigenic protein induces graft rejection, allergic reaction or autoimmune disease; wherein said hydrolyzed product comprises a mixture of peptides having molecular weights of less than 10 kDa obtained by hydrolysis of said antigenic protein by a protease.
- 32. (Previously presented) The pharmaceutical composition of claim 31 wherein the protease is chymotrypsin.